

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC COOPERATIVE )  
CORPORATION )  
\_\_\_\_\_ )

CASE NO. 2005-00285

ALLEGED FAILURE TO COMPLY WITH )  
KRS 278.042 AND ADMINISTRATIVE )  
REGULATION 807 KAR 5:006, SECTION 24 )

O R D E R

Salt River Electric Cooperative Corporation ("Salt River"), a Kentucky corporation engaging in the distribution of electricity to the public for compensation for lights, heat, power, and other uses, is a utility subject to Commission jurisdiction. KRS 278.010(3)(a).

KRS 278.042 directs the Commission to ensure that each utility constructs and maintains its plant and facilities in accordance with accepted engineering practices as set forth in Commission regulations and the standards of the National Electrical Safety Code ("NESC"). KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by utilities. Pursuant to this statutory directive, the Commission promulgated 807 KAR 5:006, Section 24, which requires electric utilities to adopt and execute a safety program.

Commission Staff has submitted to the Commission an Incident Investigation Report dated April 8, 2005, appended hereto, in which Commission Staff alleges:

1. On March 24, 2005, Billy Hamilton was injured while reworking a 50- foot pole near Bardstown, Nelson County, Kentucky. Mr. Hamilton suffered burns on his right forearm and on the two middle fingers of his left hand.

2. At the time of the incident, Mr. Hamilton and Pat Burman were installing a 10 KVA transformer on the pole. At some point the riser that would serve the transformer became energized and energized the lighting arrester and the cutout also. Mr. Hamilton was working near the energized arrester and cutout when his right arm made contact with the energized cutout.

3. At the time of the incident, Mr. Hamilton was not wearing the required rubber gloves and rubber sleeves.

4. At the time of the incident, Mr. Hamilton was an employee of Hamilton Power Line Construction Company and was acting within the scope of his employment and within the scope of a contract between Hamilton Power Line Construction Company and Salt River.

5. NESC Section 42, Rule 420-H, requires employees to use personal protective equipment, the protective devices, and the special tools provided for their work.

6. Mr. Hamilton failed to comply with NESC Rule 420-H.

7. Salt River has adopted a Health and Safety Manual ("Salt River Manual") which describes its safety program.

8. The Salt River Manual, Section 6-604-C, as amended, requires that high voltage rubber sleeves should be used when high voltage gloves are used.

9. Mr. Hamilton failed to comply with Salt River Manual, Section 6-604-C.

After reviewing the Incident Investigation Report and being otherwise sufficiently advised, the Commission finds that *prima facie* evidence exists that Salt River failed to comply with KRS 278.042 and 807 KAR 5:006, Section 24.

The Commission, on its own motion, HEREBY ORDERS that:

1. Salt River shall appear before the Commission on September 27, 2005, at 9:00 a.m., Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of NESC, Section 42, Rule 420-H, and 807 KAR 5:006, Section 24, and of showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for these alleged violations.

2. Salt River shall submit to the Commission, within 15 days of the date of this Order, a written response to the allegations contained in the Incident Investigation Report.

3. The Incident Investigation Report dated April 8, 2005, a copy of which is appended hereto, is made part of the record of this proceeding.

4. Any motion requesting an informal conference with Commission Staff to consider matters that would aid in the handling or disposition of this proceeding shall be filed with the Commission no later than 15 days from the date of this Order.

5. Pursuant to KRS 278.360, the official record of the proceeding shall be by video only, unless otherwise requested by a party to this proceeding within 10 days prior to the hearing.

Done at Frankfort, Kentucky, this 2nd day of September, 2005.

By the Commission

ATTEST:

for the   
Executive Director

## APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2005-00285 DATED September 2, 2005

# **INCIDENT INVESTIGATION ~ Staff Report**

**Report Date** ~ April 8, 2005

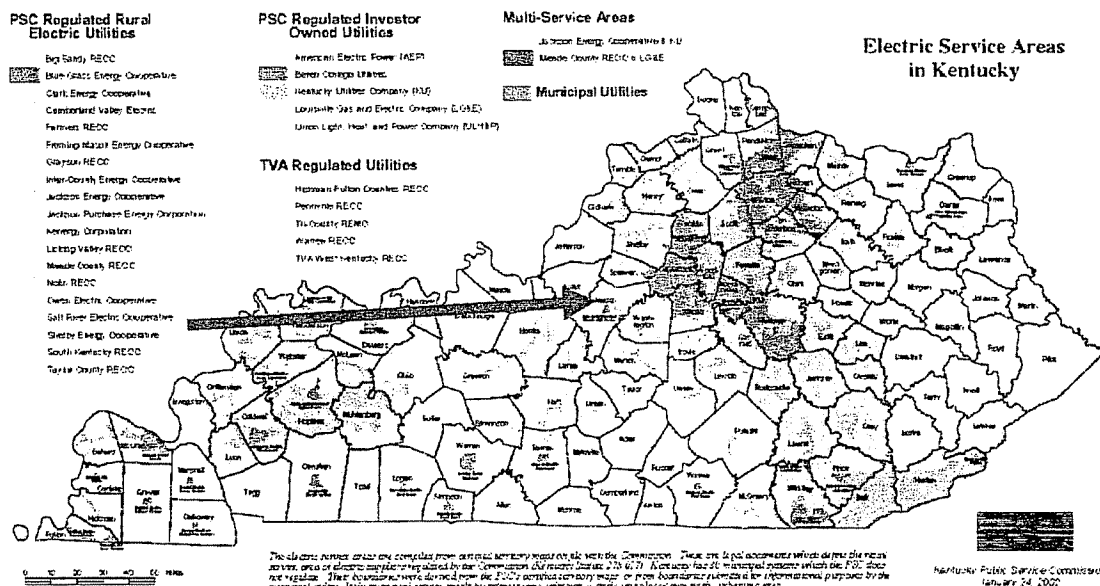
**Incident Date** ~ March 24, 2005

**Serving Utility** ~ Salt River Electric Cooperative Corporation

**Incident Location** ~ Bardstown, Kentucky

**Victim** ~ Mr. Billy Hamilton

**PSC Lead Investigator** ~ Mr. Steve Kingsolver





# Kentucky Public Service Commission

## Electric Utility Personal Injury Incident Report

<b>Utility:</b>	<b>Salt River Electric Cooperative Corporation</b>	
<b>Reported By:</b>	Tim Sharp, Vice President of Operations.	
<b>Incident Occurred</b>	March 24, 2005	Approximately 11:40AM
<b>Utility Notified:</b>	March 24,2005	Approximately 11:40AM
<b>PSC Notified:</b>	March 24, 2005	Approximately 12:01PM
<b>PSC Investigated:</b>	March 24, 2005	Approximately 1:45PM
<b>Report Received:</b>	April 1, 2005	
<b>Incident Location:</b>	Intersection of Kentucky Highways 245 and 150 near Bardstown, Kentucky, in Nelson County.	
<b>Incident Description:</b>	<p>A Hamilton Power Line Construction crew was working for Salt River Electric Cooperative Corporation ("Salt River ECC") near the intersection of Kentucky Highways 245 and 150. The contract crew was reworking a 50 foot pole. The pole that they were reworking had a 3 phase circuit attached that was being changed from vertical to horizontal construction. This work had been nearly completed and they were in the process of installing a 10 KVA transformer on this pole to be able to switch the feed to the stoplights at this intersection.</p> <p>They had 2 linemen working this pole and were working out of two bucket trucks. Pat Burman had been working this pole most of the day and Billy Hamilton (Victim) had completed his work on another pole and came to help Pat Burman on his pole. At some point, the riser that would serve the newly installed 10 KVA transformer had been energized. This made the lightning arrester and the top of the cutout energized. The fuse door had not been put in the cutout at the time of the incident. Billy Hamilton (Victim) was working near the energized lightning arrester and cutout helping to install a pole band. It appears that Billy Hamilton was reworking the ground wire that goes to the bottom of the lightning arrester when his right arm made contact with the top of the energized cutout. It was at this point that the electrical contact took place.</p> <p>It appears that Billy Hamilton (Victim) did not know, and was not informed that the riser serving the newly installed transformer had been energized. Billy Hamilton (Victim) and Pat Burman were working within the 5-foot zone without the required rubber gloves and rubber sleeves. The lack of communication between Billy Hamilton (Victim) and Pat Burman, the two linemen working the pole, and foreman, Wayne Hamilton, was one of the factors that lead to this incident.</p>	



# Kentucky Public Service Commission

## Electric Utility Personal Injury Incident Report

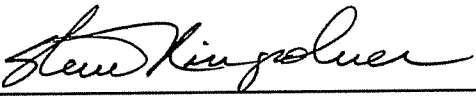

<b>Victim:</b>	<b>Name</b>		<b>Address</b>	<b>Employer</b>
	Billy Hamilton		PO Box 416 Bardstown, Ky. 40004	Hamilton Power Line Construction Company
	<b>Fatality</b>	<b>Age</b>		
	No	48		
	<b>Injury:</b>	Burns on the right forearm and the two middle fingers of the left hand.		
<b>Witnesses:</b>	<b>Name</b>		<b>Address</b>	<b>Employer</b>
	Wayne Hamilton		2261 New Haven Rd. Bardstown, Ky.	Hamilton Power Line Construction Company
	Pat Burman		2261 New Haven Rd. Bardstown, Ky.	Hamilton Power Line Construction Company
	Frankie Hamilton		2261 New Haven Rd. Bardstown, Ky.	Hamilton Power Line Construction Company
	Ronnie Downs		2261 New Haven RD. Bardstown, Ky.	Hamilton Power Line Construction Company
<b>Information From:</b>	<b>Name</b>		<b>Position</b>	<b>Employer</b>
	Tim Sharp		VP Operations	Salt River ECC
	Tim French		Safety Coordinator	Salt River ECC
	Wayne Hamilton		Foreman	Hamilton Power Line Construction Company
	Pat Burman		Lineman	Hamilton Power Line Construction Company





# Kentucky Public Service Commission

## Electric Utility Personal Injury Incident Report

<b>Probable Violations</b>	The contract crew's actions violated the following rules: <b><u>KAR 5:041, Section 3 - Acceptable Standards, (§1)</u></b> 1. NESC: Section 42 420-H Rubber Glove Use. <b><u>807 KAR 5:006, Section 24 - Safety Program</u></b> 1. American Public Power Association: (APPA Safety Manual) 2004 Edition. This Safety Manual has been adopted by the Salt River ECC's Board of Directors. Section 6 604-C Rubber Glove Use. 2. Salt River ECC's Amendment to Section 6 604-C of the APPA Safety Manual. This amendment was established by PSC Case No. 1999-00112 dated September 20, 1999. This requires that high voltage rubber sleeves are used when high voltage gloves are used.		
<b>Investigated By:</b>	<b>Name</b>	<b>Company</b>	
	Steve Kingsolver	PSC Engineering Staff	
<b>Signed:</b>		<b>Date</b>	4/8/05
<b>Reviewed By:</b>	<b>Name</b>	<b>Company</b>	
	Jim Welch	Director of Engineering, PSC	
<b>Signed:</b>		<b>Date</b>	4/8/05

Attachments:      **A. Salt River Electric Cooperative Incident Report**  
                         **B. Text of Cited Violations**  
                         **C. KPSC Photographs of Incident Site**



# Kentucky Public Service Commission

Electric Utility Personal Injury Incident Report

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## Attachment A

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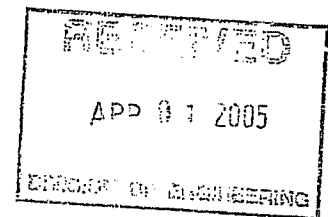
**Salt River Electric Cooperative Incident Report**



## SALT RIVER ELECTRIC

111 West Brashear Avenue • Bardstown, Kentucky 40004  
(502) 348-3931 • (502) 955-9732 • Fax (502) 348-1993

March 31, 2005



Mr. Steve Kingsolver  
Electric Utility Investigator  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort KY 40602

Re: Contact Incident Report  
Billy Hamilton contact on March 24, 2005

Dear Mr. Kingsolver:

Enclosed is Salt River ECC's report (with attachments) on the contact incident of March 24, 2005, involving contractor Billy Hamilton. The contact took place at the intersection of Kentucky Highways 245 and 150 near Bardstown, Nelson County, Kentucky. The investigator for Salt River was Tim French, Safety/Training Coordinator for our cooperative.

If you have questions or require further information, contact me at my office at 502.350.1605 or on my cell phone at 502.249.0524.

Sincerely,

Tim Sharp, P.E.  
Vice President of Operations

Enclosures



## SALT RIVER ELECTRIC

111 West Brashear Avenue • Bardstown, Kentucky 40004  
(502) 348-3931 • (502) 955-9732 • Fax (502) 348-1993

### **Contact Incident Investigation Report**

**Date of Contact:** 03-24-2005

**Party Involved:** Billy Hamilton, PO Box 416, Bardstown, Kentucky

**Phone:** (502) 249-2079

**Investigator:** Tim French, Training/Safety Coordinator

At 11:40 am on March 24, 2005, an employee of Hamilton Power Line Construction Company, Billy Hamilton, was involved in an electrical contact while performing work for Salt River ECC.

Hamilton Power Line Construction was relocating a set of gang-operated air break switches three poles to the east of their original point of installation. The job also consisted of "flattening horizontally" two vertically constructed C-4 pole structures. The two vertical poles are located between the original location of the air break switches and the new location of the air break switches.

There is a traffic control device (red light) which directs the flow of traffic at the intersection of KY State Highway 150 and KY State Highway 245. The traffic control device was fed originally from a transformer connected to CØ of circuit 2 out of the shopping center substation. This transformer was on the east vertical C-4 pole.

Another transformer and service were installed on the west vertical C-4 pole to replace the original traffic control feed. This transformer on the west vertical pole was to be fed from BØ of circuit 5 out of the East Bardstown Substation.

The foreman at the job site was Wayne Hamilton. He decided to move the traffic control over to the new feed so that the main 3Ø line between the two vertical C-4s could be de-energized and flattened horizontally. This would allow him to do the job more efficiently.

The first C-4 (to the west) had the 336ACSR conductors dead-ended on eight foot pre-fab cross arms. This is circuit 5 and it remained energized and on 1-shot. The second eight-foot cross arm was mounted four feet below the top cross arm. The 336ACSR conductors were dead-ended against the lower cross arm. Since the route turns, the lower cross arm was mounted in the "buck" position. The wires on the lower cross arm were cut open on each end and grounded on the east vertical C-4.

Pat Burman, a 13-year experienced lineman, was set up and working from a bucket truck on the west pole. Once the wires were flattened from vertical to horizontal, the structures are reclassified as a double C-7X (for 2 three-phase dead-ends on cross arms) and no longer C-4 (three-phase vertical, double dead-end). Burman ran the new triplex service for the traffic light and made it up at the transformer. The other end of the triplex was in the clear, dead-ended at the steel pole supporting the traffic light.

Wayne Hamilton said the plan was for the police to come and direct traffic while the transformer fed from CØ of circuit 2 of the Shopping Center substation was disconnected and the transformer fed from BØ of circuit 5 of East Bardstown substation was connected.

Burman had prepared the new transformer. The replacement transformer was a 10KVA conventional with a cut-out and lightning arrestor mounted on the lower 8-foot cross arm.

Billy Hamilton had finished his work on the pole where the gang switches were originally located and had now moved his bucket truck to the east of Burman's bucket truck. Billy Hamilton is a 30-year experienced lineman 48 years of age.

Burman had installed the top jumper feeding the arrestor and the top of the cut-out onto the BØ of circuit 5 of East Bardstown sub. There was no fuse in the cut-out; therefore, the transformer was not energized. Burman did not remember putting the transformer jumper on the line but does remember taking it off after the accident. Burman did not mention to Billy Hamilton that the cut-out and arrestor are hot. Billy Hamilton said he noticed no fuse barrel in the cut-out and thought the cut-out was dead.

Wayne Hamilton said he did not notice the top of the cut-out being on the line.

While waiting for the police to arrive to direct traffic, Wayne Hamilton directs Billy Hamilton and Pat Burman to install a pole band beneath the bottom 8-foot cross arm. The pole band was for guying while changing from the C-4 to the C-7.

Billy Hamilton was reworking the bottom of the arrestor (energized) ground wire so the pole band would not be in contact with the ground wire when he made contact between the arrestor ground wire and the top of the cut-out.

Billy Hamilton was lowered to the ground by Groundman Frankie Hamilton utilizing the pedestal controls. Billy Hamilton never lost consciousness. He was transported to Flaget Memorial Hospital in Bardstown, Kentucky, and later transported to University Hospital in Louisville, Kentucky. He received burns to the middle fingers of his left hand and burns to the right arm between the wrist and elbow about half way around. Billy was released on March 26, 2005, and sent home. He remains off work.

Frankie Hamilton and Ronnie Downs were installing an anchor underneath the pole at the time of the contact but neither saw it occur.

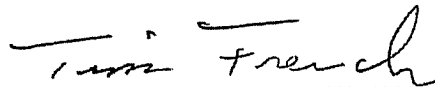
Circuit 5 out of East Bardstown substation locked out and was out of service for eight minutes while communications between Salt River dispatcher Tommy Fenwick and Wayne Hamilton took place. SCADA showed 2038 amps of fault current on BØ to ground before opening circuit 5.

## FINDINGS

1. Billy Hamilton and Pat Burman failed to communicate that the cut-out was energized during the installation of the pole band.
2. Wayne Hamilton failed to inform Billy Hamilton that the cut-out was energized prior to Billy going up to assist Burman with the pole band.
3. Neither Billy Hamilton nor Pat Burman were wearing the required rubber gloves and rubber sleeves as required within five feet of an energized primary conductor.
4. The system is 7200 volts phase to ground and 12,470 volts phase-to-phase.
5. The north conductor on the top 8-foot cross arm was covered utilizing two (2) six-foot line hoses and one (1) three-foot rubber blanket. This was the phase closest to the bucket trucks. (AØ phase of circuit 5 out of East Bardstown sub.) The other two phases (B and C) were not covered.
6. The circuit did open after one operation.
7. Both Billy Hamilton and Burman were wearing eye protection. Both had on 100% cotton uniforms which were not damaged in the arc explosion.
8. Billy Hamilton was wearing leather work gloves which showed burn marks to the middle fingers of the left glove.
9. Burman said he was shocked but had no signs of injury. He remained at work.
10. There was 10 inches of air clearance between the ground wire of the bottom of the arrestor and the top of the cut-out.
11. There was 28 inches of air clearance between the top of the arrestor and the tip of the exposed BØ dead ended on the top cross arm.
12. There was 72 inches from the pole band to the exposed BØ dead ended on the top cross arm.
13. Billy Hamilton stated, "I did not look to see if the cut-out was hot. I did not see a fuse barrel in it, so I assumed it was not hot."

Interviews were conducted on 3/30/05 by Tim French with Pat Burman, Billy Hamilton and Wayne Hamilton.

Prepared by:

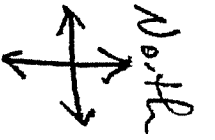


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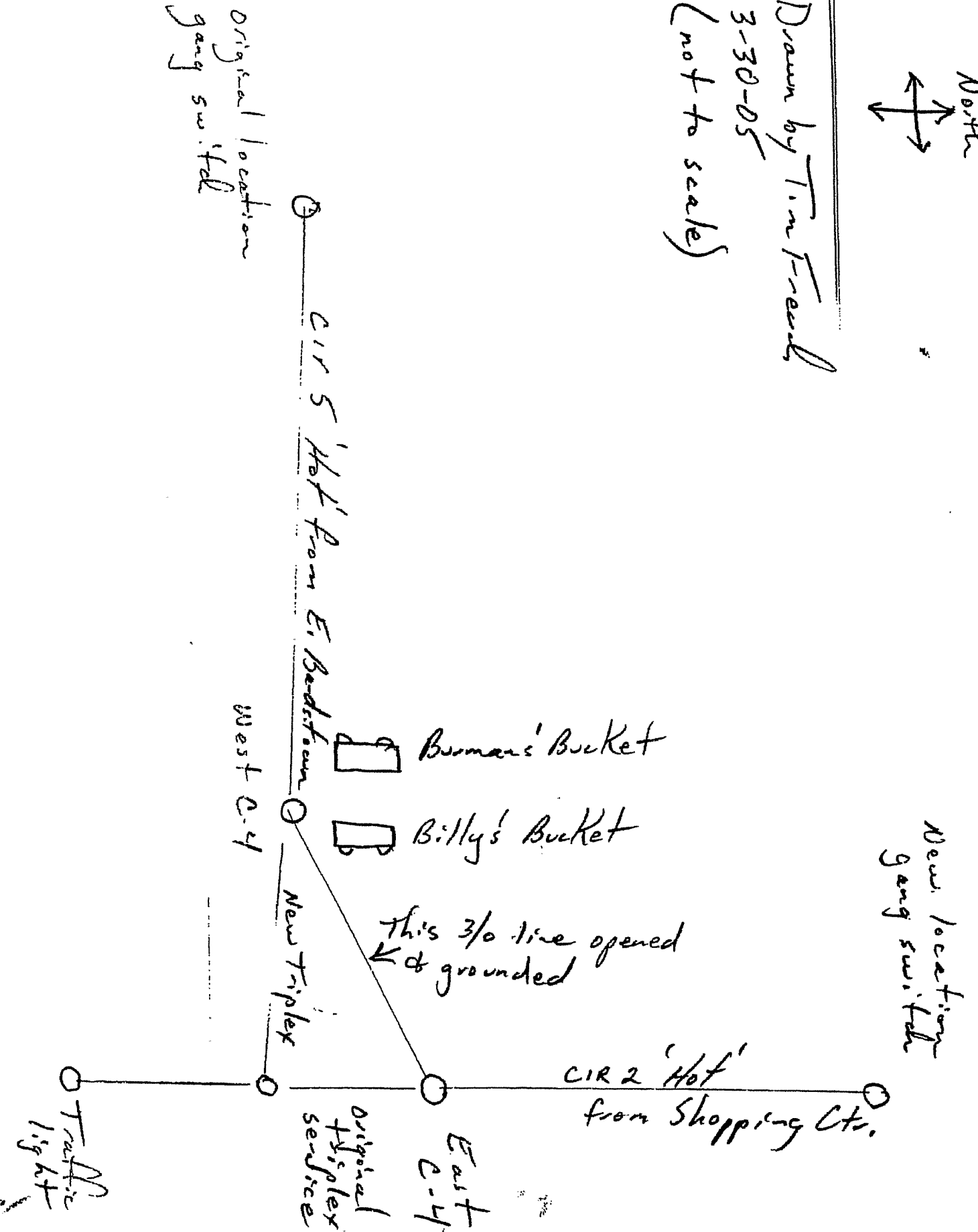
Tim French, Training/Safety Coordinator  
Salt River Electric Cooperative Corporation  
March 31, 2005

Attachments: Map  
Site Sketch  
Photographs (on CD)

cc: Tim Sharp, Vice President of Operations  
Jan Hedgepeth, Manager of Human Resources



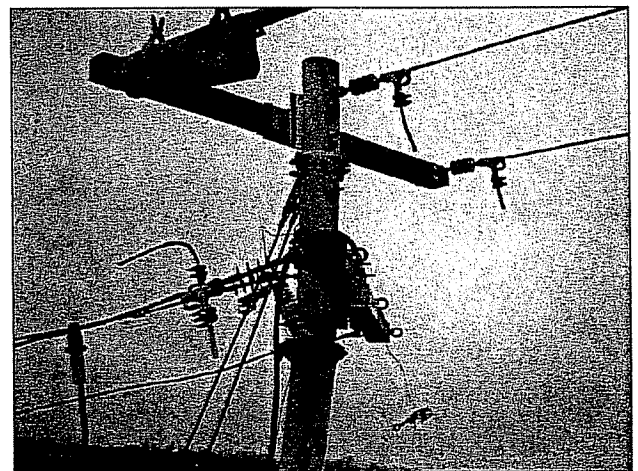
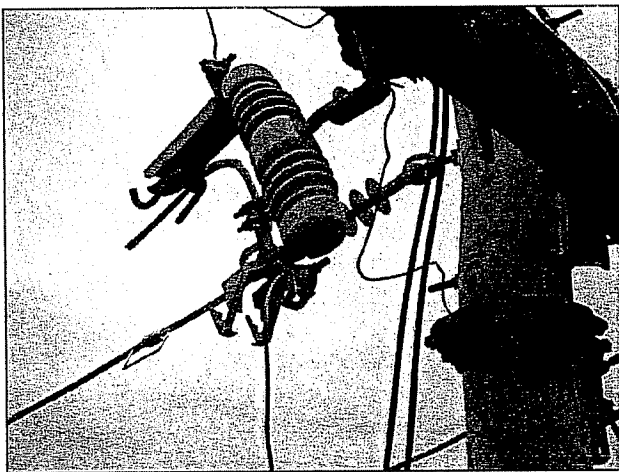
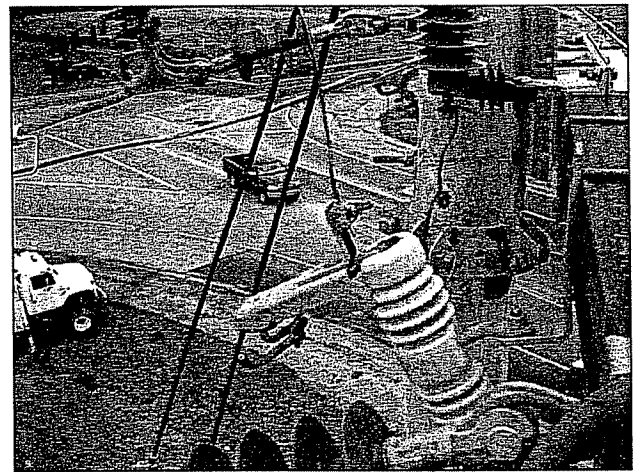
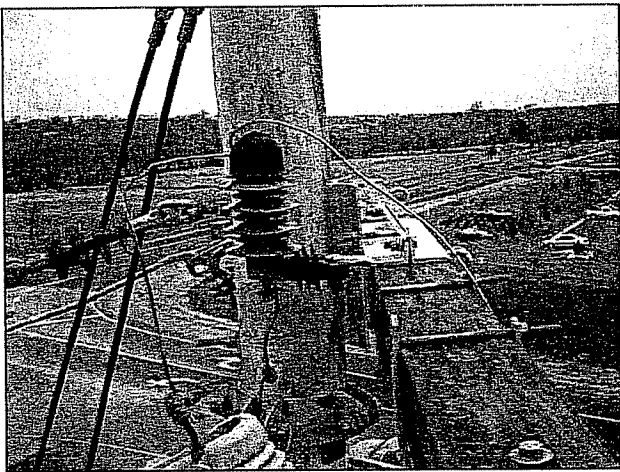
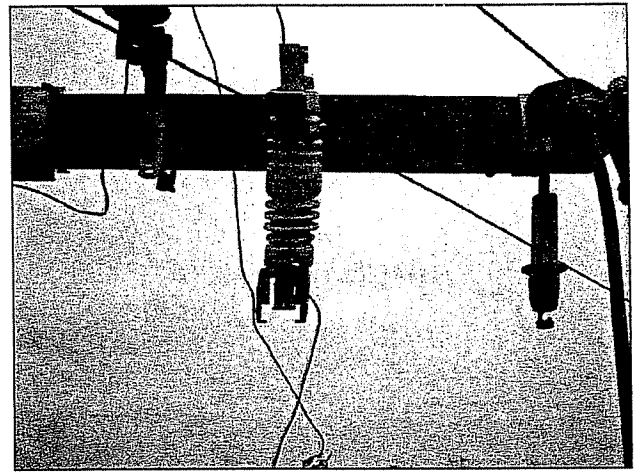
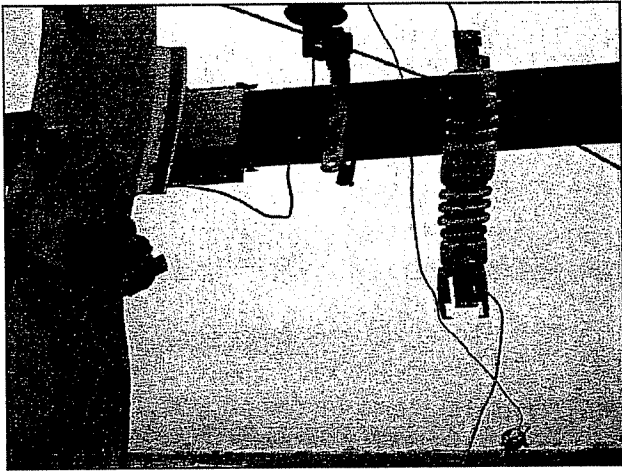
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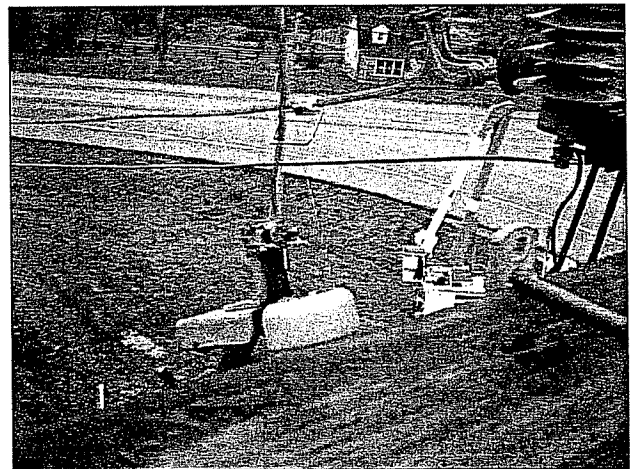
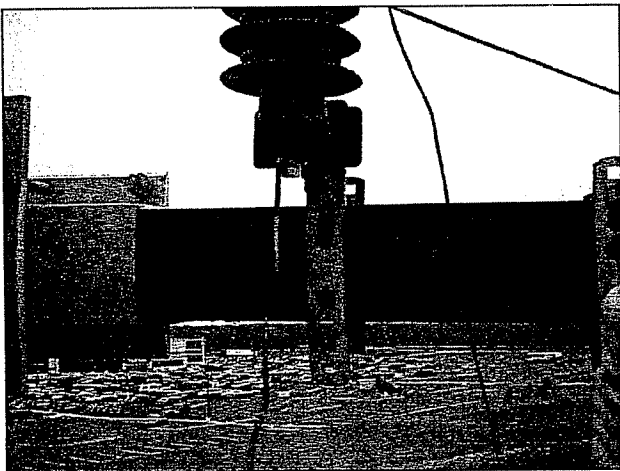
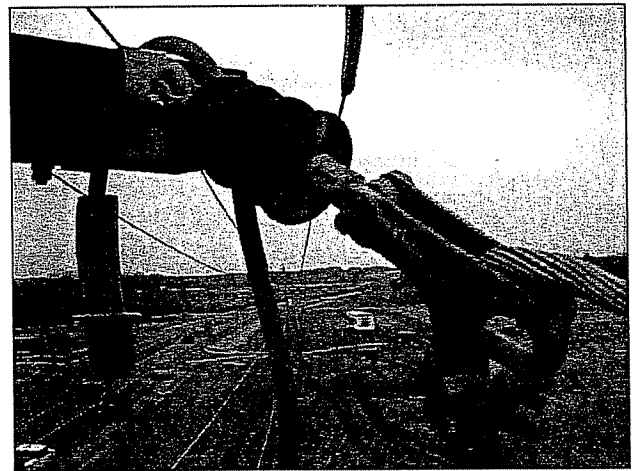
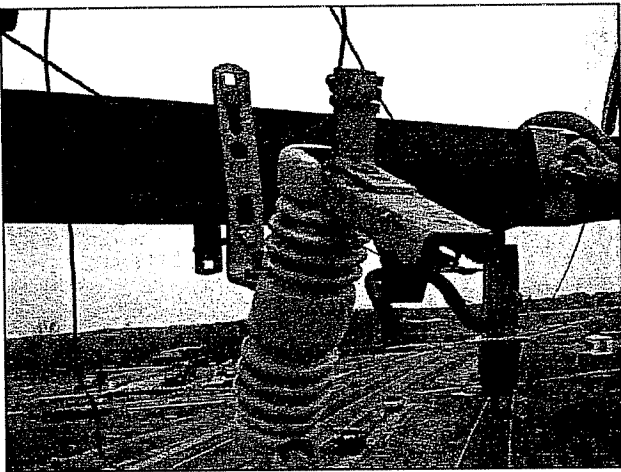
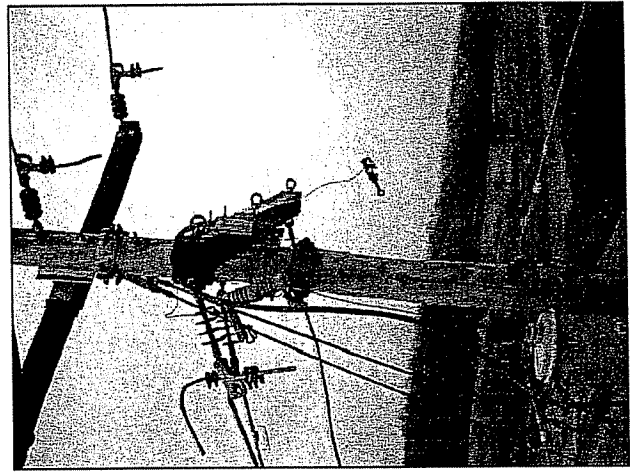
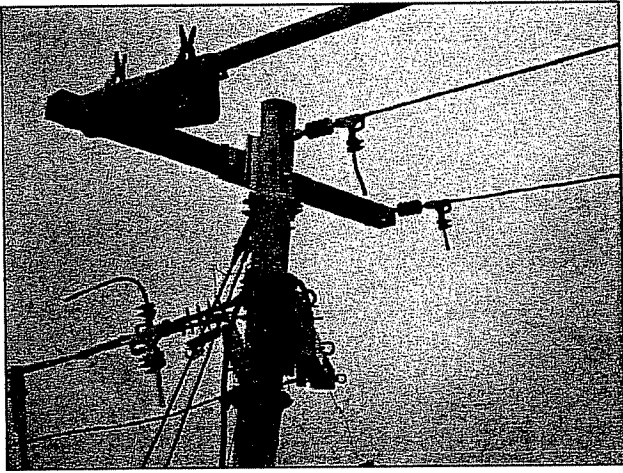


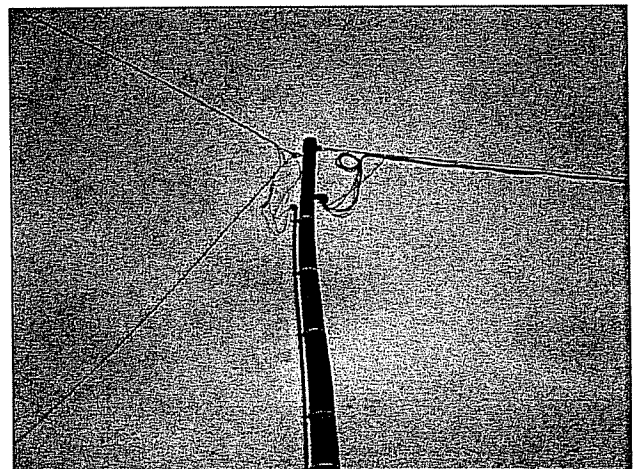
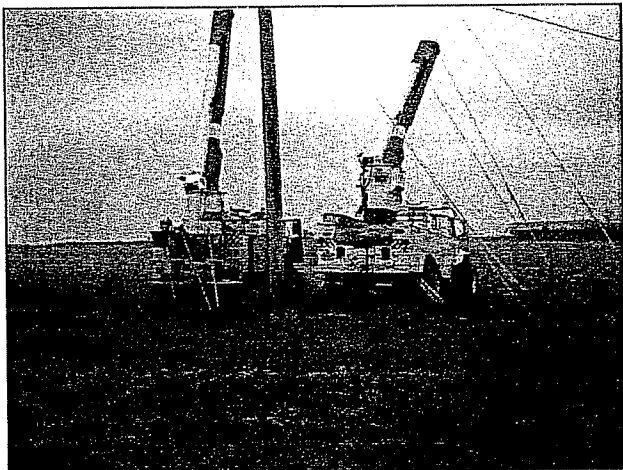
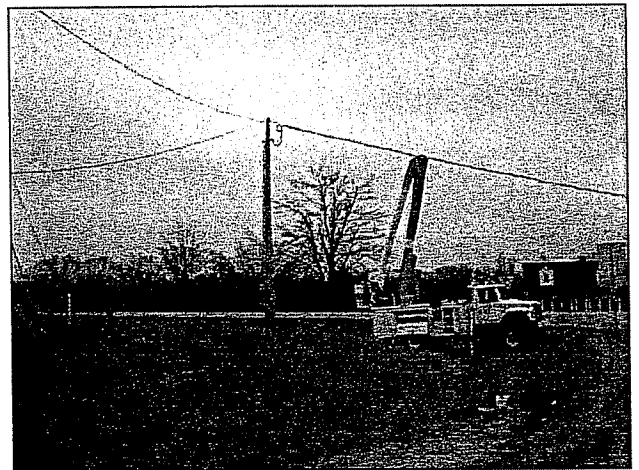
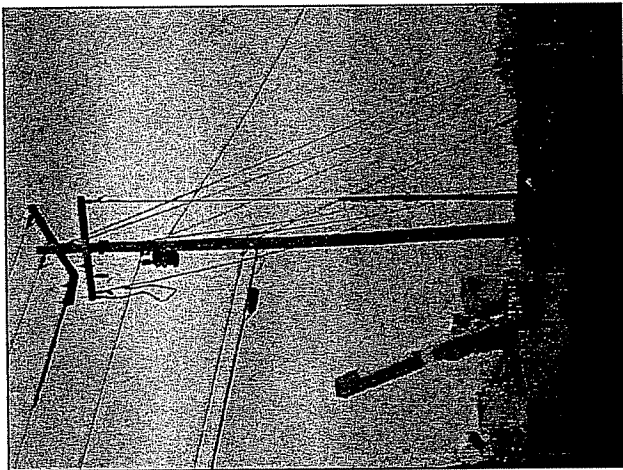
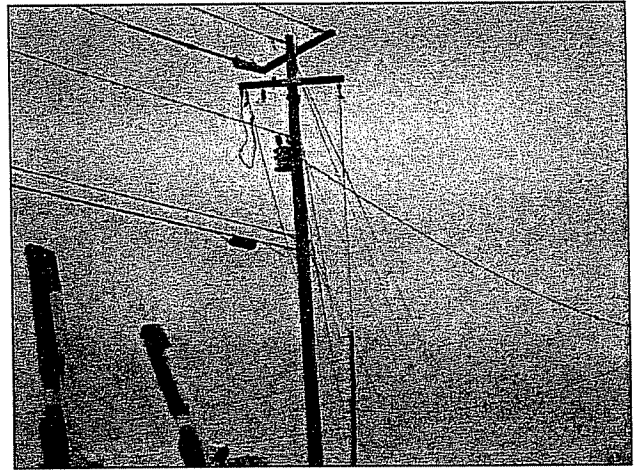
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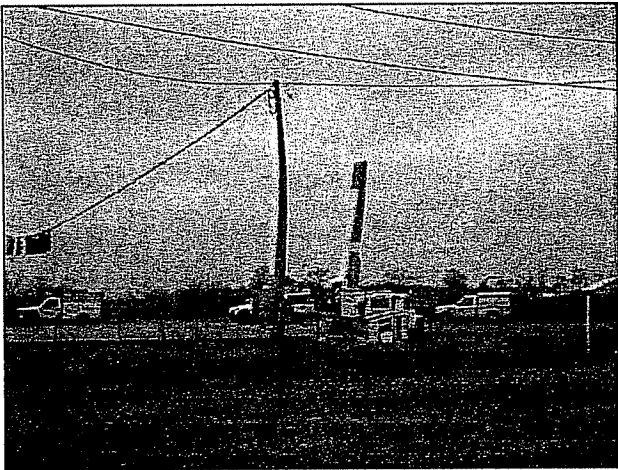
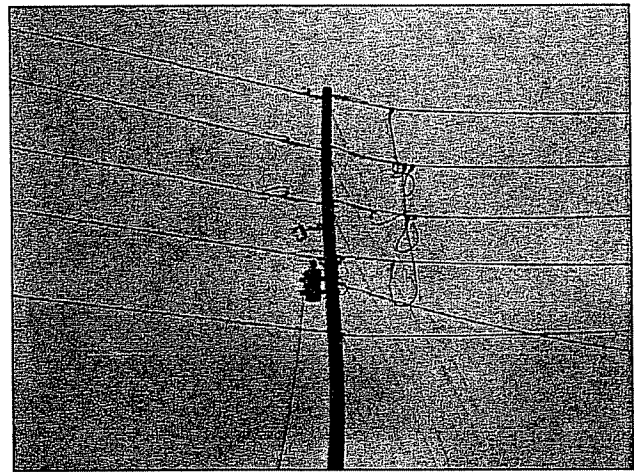
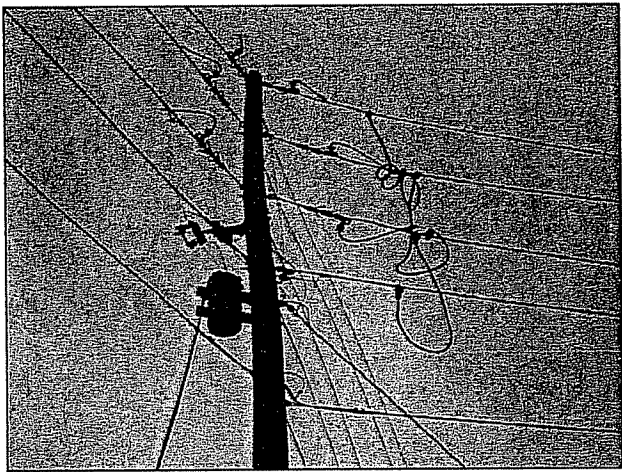
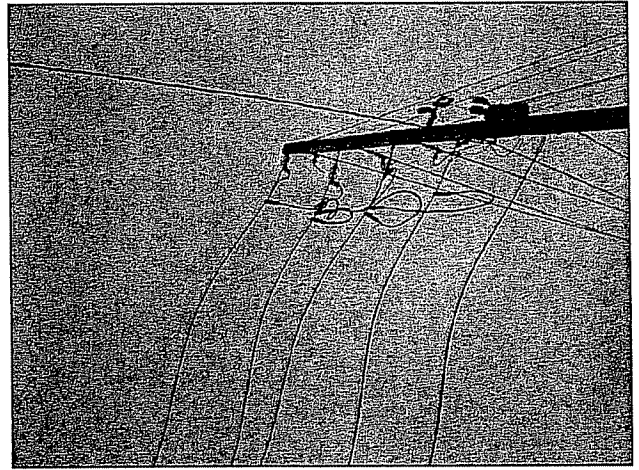
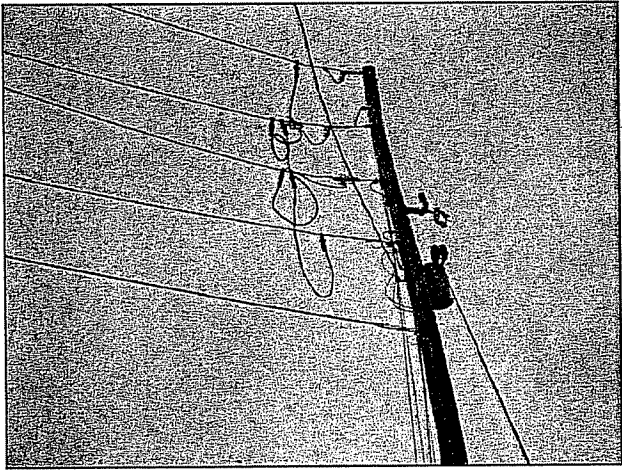


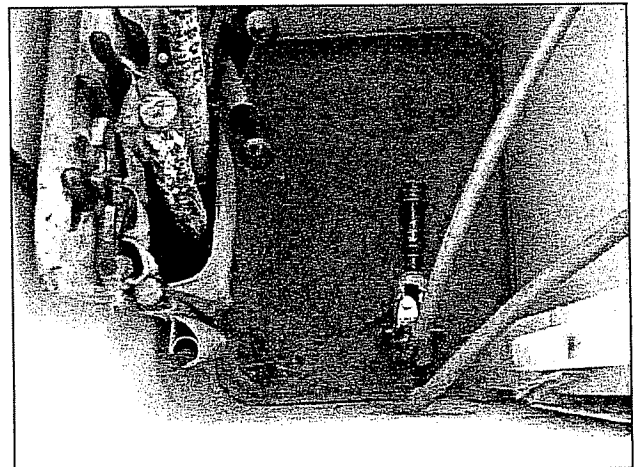
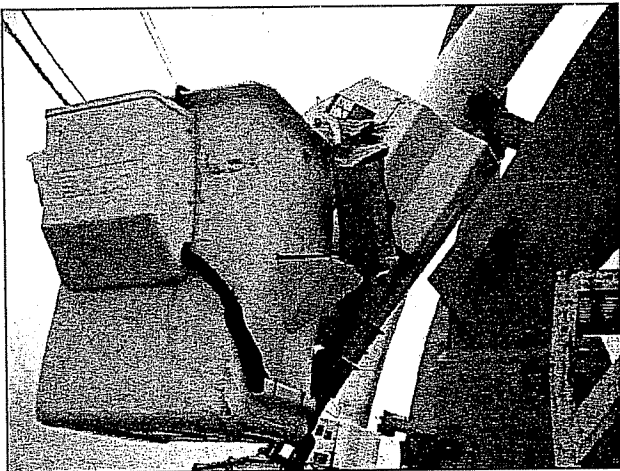
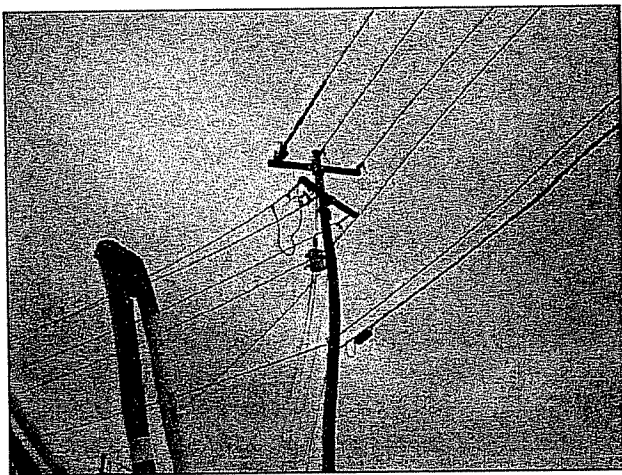
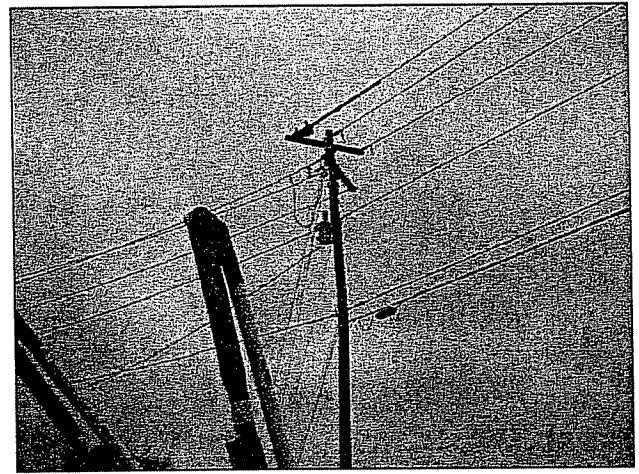
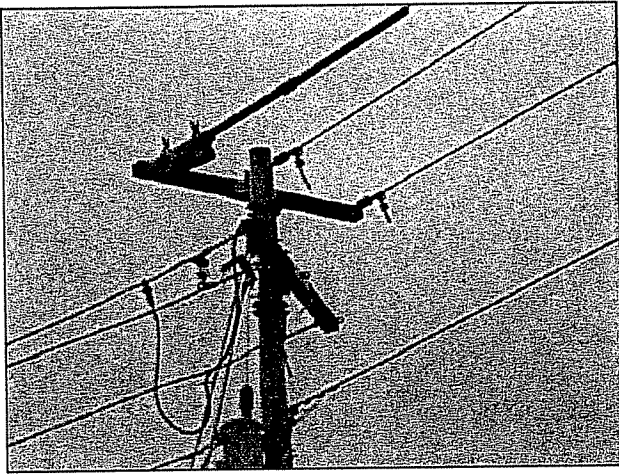


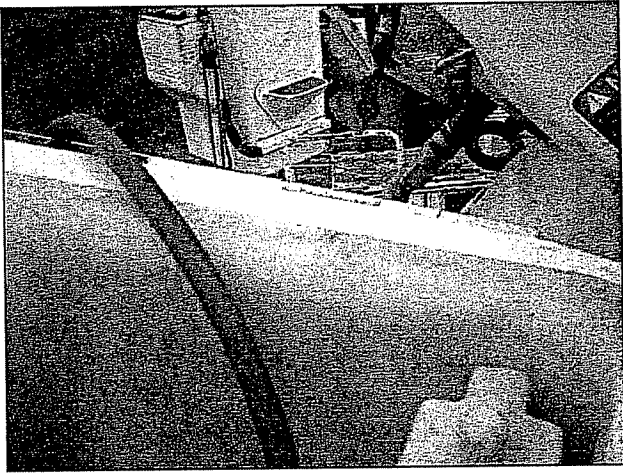














# Kentucky Public Service Commission

Electric Utility Personal Injury Incident Report

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## Attachment B

Text of cited Violations

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## 807 KAR 5:041. Electric.

### Section 3. Acceptable Standards.

A utility shall construct and maintain its plant and facilities in accordance with good accepted engineering practices. Unless otherwise specified by the commission, the utility shall use applicable provisions in the following publications as standards of accepted good engineering practice for construction and maintenance of plant and facilities, herein incorporated by reference:

(1) National Electrical Safety Code; ANSI C2. 1990 Edition, available by contacting the IEEE Service Center, 445 Hoes Lane, P. O. Box 1331, Piscataway, New Jersey 08855-1331. This material is also available for inspection and copying, subject to copyright law, at the offices of the Public Service Commission, 730 Schenkel Lane, P. O. Box 615, Frankfort, Kentucky 40602, Monday through Friday between the hours of 8 a.m. to 4:30 p.m. local time.

(2) National Electrical Code; ANSINFPA 70. 1990 Edition, available by contacting the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02169. This material is also available for inspection and copying, subject to copyright law, at the offices of the Public Service Commission, 730 Schenkel Lane, P. O. Box 615, Frankfort, Kentucky 40602, Monday through Friday between the hours of 8 a.m. to 4:30 p.m. local time.

(3) American National Standard Code for Electricity Metering; ANSI C12.1. 1982 Edition, available by contacting the Institute of Electrical and Electronics Engineers, Inc., 345 E. 47th Street, New York, New York 10017;

(4) USA Standard Requirements, for Instrument Transformers; ANSI Standard C57.13, 1978 Edition, available by contacting the IEEE Service Center, 445 Hoes Lane, P. O. Box 1331, Piscataway, New Jersey 08855-1331. This material is also available for inspection and copying, subject to copyright law, at the offices of the Public Service Commission, 730 Schenkel Lane, P. O. Box 615, Frankfort, Kentucky 40602, Monday through Friday between the hours of 8 a.m. to 4:30 p.m. local time.

(5) The adoption and applicability of the National Electrical Code as a standard of utility construction is limited to electric utility auxiliary buildings which are not an integral part of a generating plant, substation, or control center. Integral part is defined as essential to the operation or necessary to make complete.

(6) All materials incorporated by reference above are available for public inspection and copying at the Public Service Commission of Kentucky, 730 Schenkel Lane, Frankfort, Kentucky 40601, between the hours of 8 a.m. and 4:30 p.m.



## Section 42. General Rules for Employees

### 420. Personal General Precautions

#### A. Rules and Emergency Methods

1. Employees shall carefully read and study the safety rules, and may be called upon at any time to show their knowledge of the rules.
2. Employees shall familiarize themselves with approved methods of first aid, rescue techniques, and fire extinguishment.

#### B. Qualifications of Employees

1. Employees whose duties require working on or in the vicinity of energized equipment or lines shall perform only those tasks for which they are trained, equipped, authorized, and so directed. Inexperienced employees shall: (a) work under the direction of an experienced and qualified person at the site, and (b) perform only directed tasks.
2. If an employee is in doubt as to the safe performance of any assigned work, the employee shall request instructions from the employee's supervisor or person in charge.
3. Employees who do not normally work on or in the vicinity of electric supply lines and equipment but whose work brings them into these areas for certain tasks shall proceed with this work only when authorized by a qualified person.

#### C. Safeguarding Oneself and Others

1. Employees shall heed safety signs and signals and warn others who are in danger or in the vicinity of energized equipment or lines.
2. Employees shall report promptly to the proper authority any of the following:
  - a. Line or equipment defects such as abnormally sagging wires, broken insulators, broken poles, or lamp supports
  - b. Accidentally energized objects such as conduits, light fixtures, or guys
  - c. Other defects that may cause a dangerous condition
3. Employees whose duties do not require them to approach or handle electric equipment and lines shall keep away from such equipment or lines and should avoid working in areas where objects and materials may be dropped by persons working overhead.
4. Employees who work on or in the vicinity of energized lines shall consider all of the effects of their actions, taking into account their own safety as well as the safety of other employees on the job site, or on some other part of the affected electric system, the property of others, and the public in general.
5. No employee shall approach or bring any conductive object, without a suitable insulating handle, closer to any exposed energized part than allowed by Rule 431 (communication) or Rule 441 (supply), as applicable.
6. Employees should exercise care when extending metal ropes, tapes, or wires parallel to and in the proximity of energized high-voltage lines because of induced voltages. When it is necessary to measure clearances from energized objects, only devices approved for the purpose shall be used.

#### D. Energized or Unknown Conditions

Employees shall consider electric supply equipment and lines to be energized, unless they are positively known to be de-energized. Before starting work, employees shall perform preliminary inspections or tests to determine existing conditions. Operating voltages of equipment and lines should be known before working on or in the vicinity of energized parts.

#### E. Ungrounded Metal Parts

Employees shall consider all ungrounded metal parts of equipment or devices such as transformer cases and circuit breaker housings, to be energized at the highest voltage to which they are exposed, unless these parts are known by test to be free from such voltage.

**F. Arcing Conditions**

Employees should keep all parts of their bodies as far away as practical from switches, brushes, commutators, circuit breakers, or other parts at which arcing may occur during operation or handling.

**G. Liquid-Cell Batteries**

1. Employees shall ascertain that battery areas are adequately ventilated before performing work.
2. Employees should avoid smoking, using open flames, or using tools that may produce sparks in the vicinity of liquid-cell batteries.
3. Employees shall use eye and skin protection when handling an electrolyte.
4. Employees shall not handle energized parts of batteries unless necessary precautions are taken to avoid short circuits and electrical shocks.

**H. Tools and Protective Equipment**

Employees shall use the personal protective equipment, the protective devices, and the special tools provided for their work. Before starting work, these devices and tools shall be carefully inspected to make sure that they are in good condition.

**I. Clothing**

1. Employees shall wear clothing suitable for the assigned task and the work environment. See Rule 410A2.
2. When working in the vicinity of energized lines or equipment, employees should avoid wearing exposed metal articles.

**J. Ladders and Supports**

1. Employees shall not support themselves, or any material or equipment, on any portion of a tree, pole structure, scaffold, ladder, walkway, or other elevated structure or aerial device, etc., without it first being determined, to the extent practical, that such support is adequately strong, in good condition, and properly secured in place.
2. Portable wood ladders intended for general use shall not be painted except with a clear nonconductive coating, nor shall they be longitudinally reinforced with metal.
3. Portable metal ladders intended for general use shall not be used when working on or in the vicinity of energized parts.
4. If portable ladders are made partially or entirely conductive for specialized work, necessary precautions shall be taken to ensure that their use will be restricted to the work for which they are intended.

**K. Fall Protection**

1. At elevated locations above 3 m (10 ft), climbers shall be attached to equipment or structures by a fall protection system while at the worksite, at a rest site, in aerial devices, helicopters, cable carts, and a boatswain's chair.
2. Qualified climbers may be permitted to be unattached to equipment or structures while climbing, transferring, or transitioning across obstacles on structures. Unqualified climbers shall be attached while performing these activities.
3. Fall protection equipment shall be inspected before use by the employee to ensure that the equipment is in safe working condition.
4. Fall arrest equipment shall be attached to a suitable anchorage.
5. The employee shall determine that all components of the fall protection system are properly engaged and that the employee is secure in the line-worker's body belt, harness, or any other fall protection system.

**NOTE:** Climbers need to be aware of accidental disengagement of fall protection components. Accidental disengagement is the sudden, unexpected release of a positioning strap snaphook from the D-ring of the line-worker's body belt without the user directly manipulating the latch of the snaphook. In general, there are two primary reasons for this occurrence.

## **807 KAR 5:006. General Rules.**

### **Section 24. Safety Program.**

Each utility shall adopt and execute a safety program, appropriate to the size and type of its operations. At a minimum, the safety program shall:

- (1) Establish a safety manual with written guidelines for safe working practices and procedures to be followed by utility employees.
- (2) Instruct employees in safe methods of performing their work.
- (3) Instruct employees who, in the course of their work, are subject to the hazard of electrical shock, asphyxiation or drowning, in accepted methods of artificial respiration.

never be placed beyond the outside crossarm attachment. It shall be so placed that it will not be cut by line equipment or twisted or fouled by material that may give way under strain.

- l) Employees shall not trust their weight to guy wires, pins, braces, conductors, or other such equipment that might prove unstable.
- m) When two or more employees are to work on the same pole at the same time, each shall reach the working position before the next leaves the ground. They shall descend the pole one at a time.
- n) When climbers are stored in the truck or tool room, the gaffs shall be covered.
- o) Handline shall be hung in secure location when working on a pole or in a bucket.

#### 604 Use and Care of Rubber Gloves

*Note: Supervision or Utility rules may require the use of rubber sleeves in addition to rubber gloves.*

- a) The use of rubber gloves shall be in accordance with the following table:

Table 6.8 Maximum-Use Voltage for Rubber Gloves	
Class of Glove	Voltage, V
0	1000
1	7500
2	17,000
3	26,500
4	36,000

- b) Voltage shall be considered to be phase-to-phase voltage unless all conductors except the one being worked are insulated (with protective devices) or isolated so that physical contact cannot be made with any energized part. In that case, phase-to-ground voltage will determine maximum-use voltage.

- c) Rubber gloves are recommended to be worn while working on any pole or other structure on which energized lines or equipment are located, on which lines and equipment that could be energized are located, or that are located close to energized lines or equipment where an employee could make contact. The rubber gloves should be put on before the employee ascends a pole or structure or raises an aerial device off the ground or device's cradle. Furthermore, employees should not remove the gloves until they have descended the pole or structure or returned the aerial device to the ground or cradle. As a minimum requirement, gloves shall be put on before the employee comes within falling or reaching distance (in any event not less than 5 feet) of unprotected energized circuits or apparatus or those that may become energized, and they shall not be removed until the employee is entirely out of falling or reaching distance of such circuits or apparatus. Employees shall refer to Utility policy regarding additional rubber glove requirements.

- d) In addition, rubber gloves shall be worn during the following conditions:

- (1) Working on or within falling or reaching distance of conductors, electrical equipment, or metal surface (crossarms, crossarm braces, or transformer cases), which are not effectively grounded and which may be or may become energized.
- (2) During wet or stormy weather, working on or within falling or reaching distance of any conductor or equipment that may be or may become energized at any voltage.
- (3) Required by supervision.
- (4) Removing lead sheath and sleeves from cables and joints and opening or cutting cables (until they have been proven to be de-energized at the work location by positive tests).
- (5) Performing tests on cables using approved testing devices.
- (6) Operating manually controlled air-break switches.
- (7) Opening and closing manually operated oil circuit breakers.



# Kentucky Public Service Commission

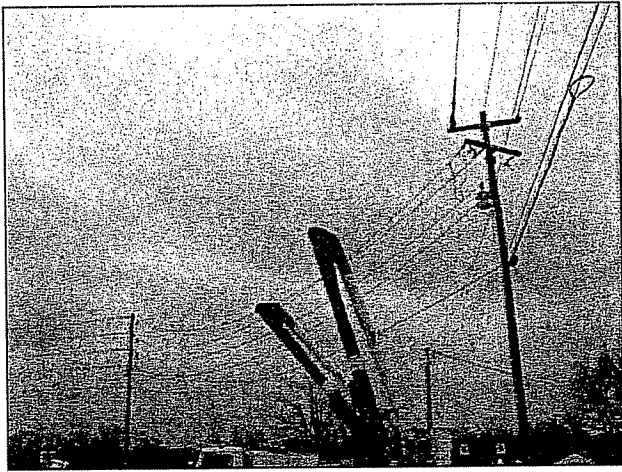
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Electric Utility Personal Injury Incident Report

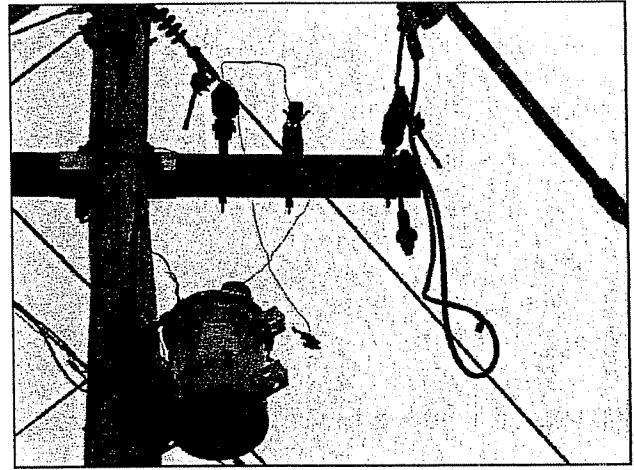
## Attachment C

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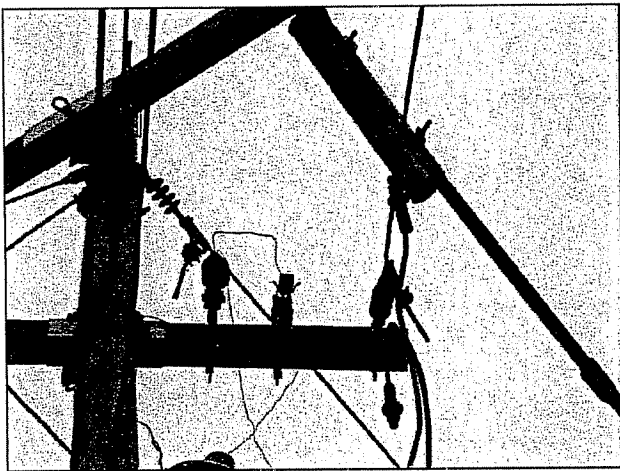
KPSC Photographs of Incident Site



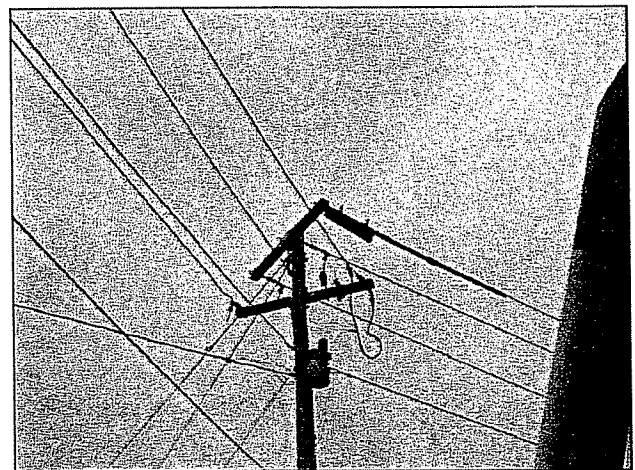
OVERALL VIEW OF SITE



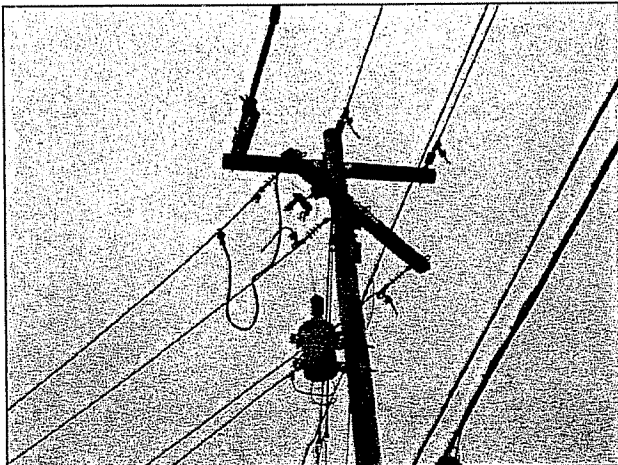
Incident occurred above transformer



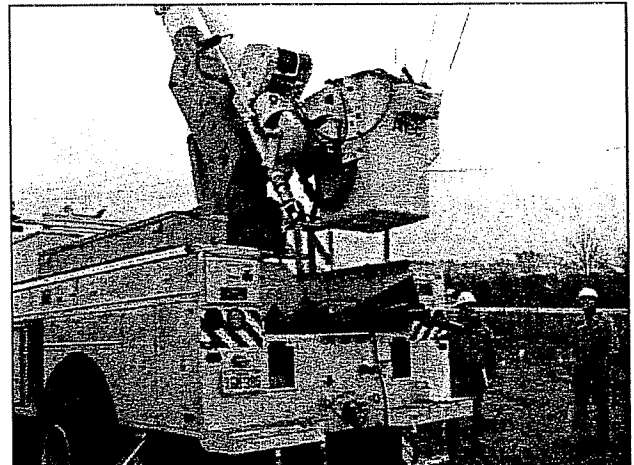
Location of incident



Overall view of pole



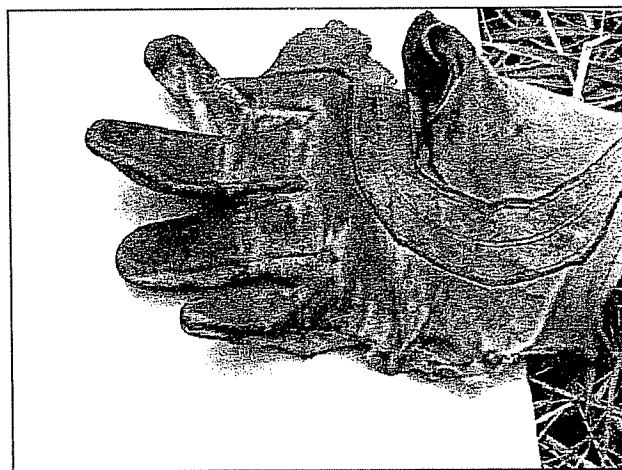
INCIDENT POLE



BUCKET THE VICTIM WAS USING



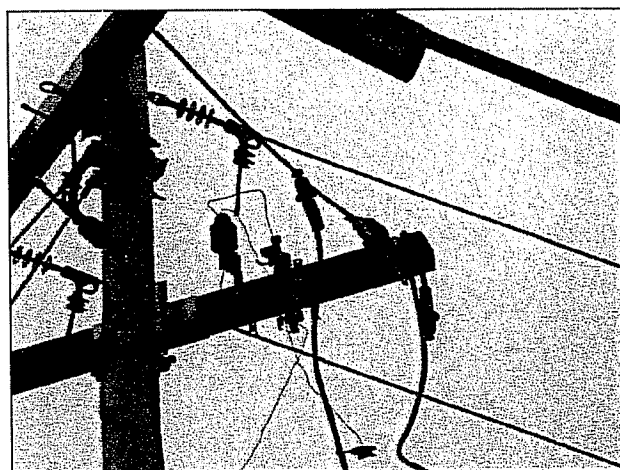
**BLOOD ON VICTIM'S BUCKET**



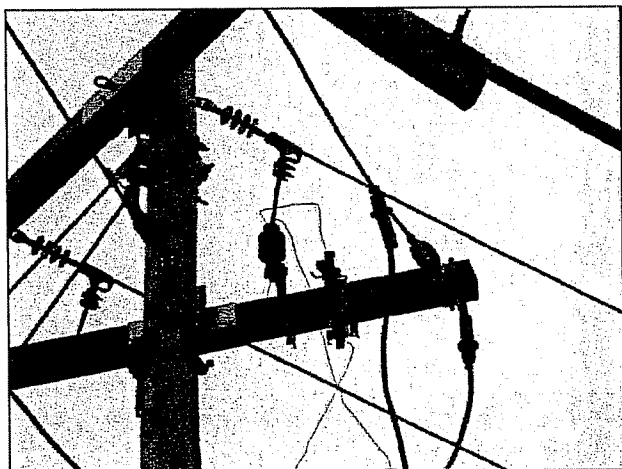
**RIGHT GLOVE OF VICTIM**



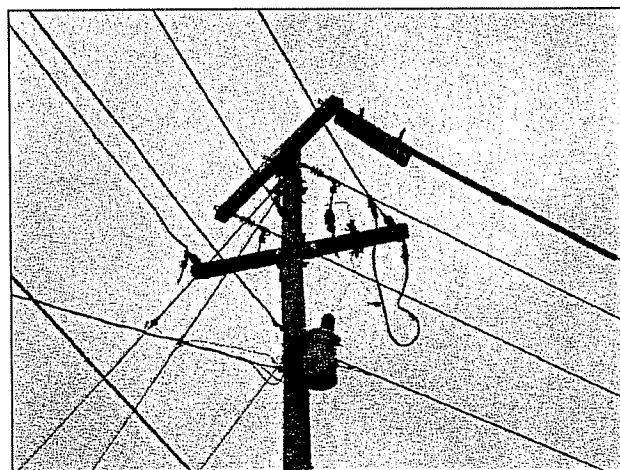
**LEATHER GLOVES OF VICTIM**



**INCIDENT SCENE**



**Fig 5:**



**INCIDENT POLE**



VEHICLE SIGN OF VICTIM'S BUCKET TRUCK

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**LEFT LEATHER GLOVE OF VICTIM**